

**Maine Department of Environmental Protection  
Biological Monitoring Unit  
BioME Aquatic Life Classification Attainment Report**

**Station Information**

<b>Station Number:</b> S360	DEP Drainage: Androscoggin
Waterbody: Cupsuptic River	HUC Code: 01040001
Town: Upper Cupsuptic Twp	HUC Name: Upper Androscoggin
Directions: 1.5 km above Big Falls	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order: 3

**Sample Information**

<b>Log Number:</b> 1245	Type of Sample: Riffle Bags	Date Deployed: 22-JUL-03
Subsample Factor: X1	Replicates: 3	Date Retrieved: 19-AUG-03

**Classification Attainment**

Statutory Class: AA	<b>Final Determination:</b> A	
Model Result with P > .6: A	Reason for Determination:	
Date Last Calculated:		

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.89	Class A, B, or C	1.00
Class B	0.11	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	1.00
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.00

**Model Variables**

01 Total Abundance of Individuals	187.33	18 Relative Abundance - Ephemeroptera	0.74
02 Generic Richness	34.00	19 EPT Generic Richness	20.00
03 Plecoptera Abundance	5.67	21 Sum of Abundances: <i>Dicrotendipes</i> ,	2.00
04 Ephemeroptera Abundance	138.33	<i>Micropsectra, Parachironomus, Helobdella</i>	
05 Shannon - Wiener Diversity	2.86	23 Relative Generic Richness- Plecoptera	0.09
06 Hilsenhoff Biotic Index	2.83	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	2.77
07 Relative Abundance - Chironomidae	0.04	<i>Cricotopus, Tanytarsus, Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.21	26 Sum of Abundances: <i>Acroneuria, Stenonema</i>	2.98
09 <i>Hydropsyche</i> Abundance	12.56	28 EP Generic Richness/14	0.79
11 <i>Cheumatopsyche</i> Abundance	1.44	30 Presence of Class A Indicator Taxa/7	0.29
12 EPT Generic Richness/ Diptera Generic Richness	2.86		

**Five Most Dominant Taxa**

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.00	1	Ephemerellidae	54.45
15 Perlidae Abundance (Family Functional Group)	4.33	2	Epeorus	8.15
16 Tanypodinae Abundance (Family Functional Group)	0.00	3	Hydropsyche	6.70
17 Chironomini Abundance (Family Functional Group)	1.67	4	Baetis	4.42
		5	Promoesia	4.27

**Maine Department of Environmental Protection  
Biological Monitoring Unit  
BioME Aquatic Life Classification Attainment Report**

---

Station Number	S360	Waterbody:	Cupsuptic River	Date Deployed:	22-JUL-03
Log Number:	1245	Town:	Upper Cupsuptic Twp	Date Retrieved:	19-AUG-03

---

**Sample Collection and Processing Information**

---

Sampling Organization:  
Taxonomist: Michael Winnell

---

**Waterbody Information**

---

Water Temperature:	16.5 °C	Specific Conductance	16.0 uS/cm	Channel Width:	15.0 m
Velocity:	80 cm/s	Dissolved Oxygen:	8.1 ppm	Channel Depth:	90.0 cm

---

**Summary of Habitat Characteristics**

---

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Stressor</u>	<u>Location</u>
Upland Conifer	Open		Not Designated
Upland Hardwood			

---

**Substrate**

---

Boulder	Rubble	Gravel	Sand
60%	15%	20%	5%

---

**Comments about the Station or Sample**

---

8/19/03 Data:  
Flow: 41.4cm/s; Depth: 90cm; Temp: 16.7C; SPC: 19uS/cm; DO: 8.5mg/L; pH: 7.3

---

**Comments about the Final Determination**

---

**Maine Department of Environmental Protection  
Biological Monitoring Unit**

**Station Number:** S360    **Waterbody:** Cupsuptic River    **Town:** Upper Cupsuptic Twp  
**Log Number:** 1245    **Subsample:** X1    **Replicates:** 3    **Calculated:**

**BioME Aquatic Life Taxonomic Inventory Report**

Taxa	Code	Count (Average of Baskets)		Biotic Index Value	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Entomobryidae</i>	09020103	0.33	0.33		--	0.2	0.2
<i>Sminthuridae</i>	09020104	0.33	0.33		--	0.2	0.2
<i>Pteronarcys</i>	09020205023	0.00	0.67	0	SH	0.0	0.4
<i>Pteronarcys biloba</i>	09020205023061	0.67	0.00		--	0.4	0.0
<i>Perlodidae</i>	09020207	0.67	0.67		--	0.4	0.4
<i>Agnetina</i>	09020209050	1.33	4.33	2	PR	0.7	2.3
<i>Agnetina capitata</i>	09020209050152	3.00	0.00		--	1.6	0.0
<i>Baetidae</i>	09020401	1.33	0.00		--	0.7	0.0
<i>Baetis</i>	09020401001	0.00	8.28	4	CG	0.0	4.4
<i>Baetis flavistriga</i>	09020401001004	3.00	0.00		--	1.6	0.0
<i>Baetis pluto</i>	09020401001009	4.33	0.00		--	2.3	0.0
<i>Plauditus</i>	09020401012	3.00	3.39		CG	1.6	1.8
<i>Heptageniidae</i>	09020402	2.33	0.00		--	1.2	0.0
<i>Epeorus</i>	09020402009	13.67	15.26	0	CG	7.3	8.1
<i>Heptagenia</i>	09020402010	3.67	4.09	2	SC	2.0	2.2
<i>Stenonema</i>	09020402015	2.67	2.98	4	SC	1.4	1.6
<i>Leptophlebiidae</i>	09020406	1.33	1.33		--	0.7	0.7
<i>Ephemerellidae</i>	09020410	102.00	102.00		--	54.4	54.4
<i>Ephemerella</i>	09020410035	1.00	1.00	1	CG	0.5	0.5
<i>Dolophilodes</i>	09020601001	0.67	0.67	0	CF	0.4	0.4
<i>Polycentropodidae</i>	09020603	0.33	0.33		--	0.2	0.2
<i>Hydropsychidae</i>	09020604	1.00	0.00		--	0.5	0.0
<i>Cheumatopsyche</i>	09020604015	1.33	1.44	5	CF	0.7	0.8
<i>Hydropsyche</i>	09020604016	4.00	12.56	4	CF	2.1	6.7
<i>Hydropsyche morosa</i>	09020604016030	1.00	0.00		--	0.5	0.0
<i>Hydropsyche slossonae</i>	09020604016031	5.67	0.00		--	3.0	0.0
<i>Hydropsyche sparna</i>	09020604016032	1.00	0.00		--	0.5	0.0
<i>Rhyacophila</i>	09020605019	0.33	1.33	2	PR	0.2	0.7
<i>Rhyacophila fuscula</i>	09020605019060	1.00	0.00		PR	0.5	0.0
<i>Glossosoma</i>	09020606020	0.33	0.33	0	SC	0.2	0.2
<i>Brachycentrus</i>	09020609043	0.00	1.00	0	CF	0.0	0.5
<i>Brachycentrus appalachia</i>	09020609043096	1.00	0.00		--	0.5	0.0
<i>Lepidostoma</i>	09020611064	0.67	0.67	1	SH	0.4	0.4
<i>Ceraclea</i>	09020618072	0.33	0.33	3	CG	0.2	0.2
<i>Cricotopus</i>	09021011037	0.33	1.33	7	SH	0.2	0.7
<i>Cricotopus trifascia</i>	09021011037070	1.00	0.00		--	0.5	0.0
<i>Parametrioctenus</i>	09021011053	0.33	0.33	5	CG	0.2	0.2
<i>Tvetenia</i>	09021011065	0.00	2.00	5	CG	0.0	1.1

**Maine Department of Environmental Protection  
Biological Monitoring Unit**

**Station Number:** S360    **Waterbody:** Cupsuptic River    **Town:** Upper Cupsuptic Twp  
**Log Number:** 1245    **Subsample:** X1    **Replicates:** 3    **Calculated:**

**BioME Aquatic Life Taxonomic Inventory Report**

Taxa	Code	Count (Average of Baskets)		Biotic Index Value	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Tvetenia bavarica grp.</i>	09021011065111	1.67	0.00		--	0.9	0.0
<i>Tvetenia vitracies</i>	09021011065113	0.33	0.00		--	0.2	0.0
<i>Micropsectra</i>	09021011070	2.00	2.00	7	CG	1.1	1.1
<i>Rheotanytarsus</i>	09021011072	0.67	0.67	6	CF	0.4	0.4
<i>Polypedilum</i>	09021011102	0.67	1.67	6	SH	0.4	0.9
<i>Polypedilum aviceps</i>	09021011102181	1.00	0.00		--	0.5	0.0
<i>Simulium</i>	09021012047	0.00	2.33	4	CF	0.0	1.2
<i>Simulium tuberosum</i>	09021012047067	2.33	0.00		--	1.2	0.0
<i>Optioservus</i>	09021113067	1.67	4.67	3	SC	0.9	2.5
<i>Optioservus fastiditus</i>	09021113067044	3.00	0.00		--	1.6	0.0
<i>Oulimnius</i>	09021113068	0.00	0.33		--	0.0	0.2
<i>Oulimnius latiusculus</i>	09021113068049	0.33	0.00		--	0.2	0.0
<i>Promoresia</i>	09021113069	0.00	8.00		--	0.0	4.3
<i>Promoresia tardella</i>	09021113069052	8.00	0.00		--	4.3	0.0
<i>Stenelmis</i>	09021113070	0.00	0.33	5	SC	0.0	0.2
<i>Stenelmis crenata</i>	09021113070055	0.33	0.00		--	0.2	0.0
<i>Sperchon</i>	09030107001	0.33	0.33		--	0.2	0.2